Non-commutative geometry, in the sense of this program, is the exploration of geometric concepts through operator-algebraic methods, as initiated and outlined by Alain Connes. A primary objective is to focus on applications of NCG with a critical appraisal of their effectiveness. Both established and potential applications will be explored and the organisers are aiming to include a breadth of topics in the program. A summary of the potential scope is given by the following list:

- the NCG approach to the standard model,
- non-commutative variational methods,
- exactly solved models,
- spectral geometry,
- non-compact (non-unital) geometries,
- dynamical systems,
- number theory,
- KMS theory,
- twisted K-theory,
- condensed matter physics applications,
- Hopf algebras and quantum groups,
- foliations.

Those planning to attend include:

Call for participation: The Hausdorff Research Institute offers visiting positions for the whole period of the trimester program (for senior scientists, postdocs and PhD students). The deadline for applications is January 31, 2014. Please send applications (including CV and, for postdocs and PhD students, a letter of recommendation) using our online application form at http://www.him.uni-bonn.de/non-commutative-geometry-2014/. In addition numerous fellowships for shorter periods are available.